



**APR 13 Rec'd PCT/PTO 13 FEB 2008**

Docket No.: 071971-0741

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	:	Customer Number: 20277
Yoshitaka KINOSHITA, et al.	:	Confirmation Number: 9940
Application No.: 10/593,446	:	Group Art Unit: 2811
Filed: September 19, 2006	:	Examiner: Not Yet Assigned
For: FOLLICLE STIMULATING HORMONE SUPREAGONISTS	:	

**REQUEST FOR CORRECTED FILING RECEIPT**

Mail Stop OFR  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached is a copy of the Filing Receipt received from the U.S. Patent and Trademark Office in the above-referenced application. It is noted that the **Title, Attorney Docket Number, Inventors Information, Total and Independent Claims Numbers, Domestic Priority Data and Foreign Applications Data** are incorrect. Attached is a copy of the Declaration, Preliminary Amendment and Return Receipt Postcard which evidences that:

1. The title should read **SEMICONDUCTOR LIGHT-EMITTING DEVICE AND ILLUMINATING DEVICE.**
2. The attorney docket number should read **071971-0741**
3. The total number of claims should read **20** and the number of independent claims should read **1**.
4. The inventors information should read  
**Yoshitaka KINOSHITA, Kagoshima JAPAN**  
**Hidenori KAMEI, Fukuoka JAPAN**
5. The domestic priority data should read **This application is a 371 of PCT/JP05/05003**

**03/18/2005**

6. The foreign applications data should read **JAPAN 2004-079873 03/19/2004**

It is requested that a corrected filing receipt be issued.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Stephen A. Becker  
Registration No. 26,527

600 13<sup>th</sup> Street, N.W.  
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Phone: 202.756.8000 SAB:amm  
Facsimile: 202.756.8087  
**Date: February 13, 2008**

**Please recognize our Customer No. 20277  
as our correspondence address.**



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
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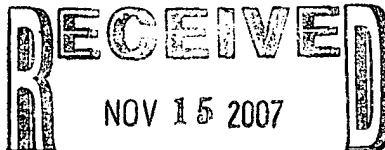
APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
10/593,446	09/19/2006	2811	900	<del>PROP-001/0100</del> <b>071971-0741</b>	<del>20</del> <b>137</b>	<del>1</del> <b>1</b>

CONFIRMATION NO. 9940

53080

MCDERMOTT WILL & EMERY LLP  
600 13TH STREET, NW  
WASHINGTON, DC 20005-3096

FILING RECEIPT



0000000025684178

Date Mailed: 09/05/2007

McDermott Will & Emery LLP  
DC Office

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

**KAGOSHIMA, JAPAN**Yoshitaka Kinoshita, ~~Residence Not Provided,~~**Hidegori KAMEI,  
Fukuoka JAPAN**Power of Attorney: The patent practitioners associated with Customer Number 53080

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP05/05003 03/18/2005  
~~which claims benefit of 60/554,418 03/10/2004~~

Foreign Applications

**JAPAN JP 2004-079873 filed March 19, 2004**

If Required, Foreign Filing License Granted: 05/31/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 10/593,446**

Projected Publication Date: 12/13/2007

Non-Publication Request: No

Early Publication Request: No

Title

Change To : Semiconductor Light-Emitting Device and Illuminating Device

~~FOLLICLE STIMULATING HORMONE SUPREAGONISTS~~

Preliminary Class

257

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

## LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

### GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



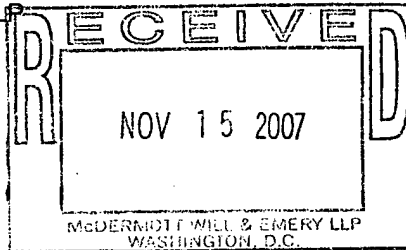
UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, Virginia 22313-1450  
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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/593,446	Yoshitaka-Kinoshita	TROP-001/01US

53080

MCDERMOTT WILL & EMERY LLP  
600 13TH STREET, NW  
WASHINGTON, DC 20005-3096



INTERNATIONAL APPLICATION NO.	
PCT/JP05/05003	
I.A. FILING DATE	PRIORITY DATE
03/18/2005	03/19/2004

CONFIRMATION NO. 9940  
371 ACCEPTANCE LETTER



Date Mailed: 09/05/2007

**NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495**

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

09/19/2006  
DATE OF RECEIPT OF 35 U.S.C. 371(c)(1),  
(c)(2) and (c)(4) REQUIREMENTS

09/19/2006  
DATE OF COMPLETION OF ALL  
35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 09/19/2006
- Copy of the International Search Report filed on 09/19/2006
- Preliminary Amendments filed on 09/19/2006
- Oath or Declaration filed on 09/19/2006
- U.S. Basic National Fees filed on 09/19/2006
- Priority Documents filed on 09/19/2006
- Power of Attorney filed on 09/19/2006

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

DEBORAH D WILLIAMS

Telephone: (703) 308-9140 EXT 205

Applicant: Yoshitaka KINOSHITA, et al.
Docket No. 071971-0741
Serial No. 10/593,446

Title: SEMICONDUCTOR LIGHT-EMITTING DEVICE AND ILLUMINATING DEVICE
Patent No.
Express Mail No.

Date Sent: 9/24/2007
☒ Hand Carried
☐ Fax
☐ Electronic
☐ Cert. of Mailing
☐ 1st Class Mail

☒ Transmittal Letter
☐ New Patent App
☐ Utility
☐ Design
☐ Cont.
☐ CIP

☐ Div.
☐ PCT
☐ RCE
☐ Prov

Other:

pages of Specification
pages of Claims
pages of Abstract
pages of Formal/Informal Drawings

☐ Small Entity
☒ Large Entity
☒ Declaration/Power of Attorney
☐ Recordation of Assignment/Security Agreement
☐ Information Disclosure Statement
☐ Form PTO 1449
☐ References attached

☐ Preliminary Amendment
☐ Response to Missing Parts Notice
☐ Resp. to Notice to Correct App. Papers

☐ Certified Copy of Priority Doc.
☐ Claim for Convention Priority

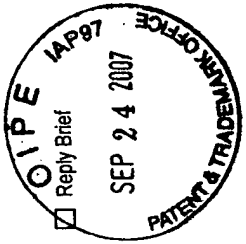
☒ Application

Check for \$
Charge Deposit Acct. 500417

MEF
Tkpr. # 3328
Secy. or PL: WPatterson

CMS Descip.:

THE PATENT AND TRADEMARK OFFICE DATE STAMPED HEREON IS ACKNOWLEDGEMENT THAT THE ITEMS, CHECKED ABOVE, WERE RECEIVED BY THE PTO ON THE DATE STAMPED.



Matsushita Ref\*: P38198-01  
(\* must be filled)Japan Firm Name: MAEDA PATENT OFFICEUS Firm Name: MWE

Application Serial No. \_\_\_\_\_

Japan Firm Ref: M05-W-065US1

US Firm Ref: \_\_\_\_\_

**DECLARATION AND POWER OF ATTORNEY FOR U.S. PATENT APPLICATION**(a) ☒ Original (b) ☐ Supplemental (c) ☐ Substitute (d) ☐ PCT (e) ☐ Design

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; and I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Title of Invention:

**SEMICONDUCTOR LIGHT-EMITTING DEVICE AND ILLUMINATING DEIVCE**

which is described and claimed in (if the following box is not checked, the specification of which is attached hereto):

1. For use when submitting this Declaration prior to U.S. application filing date

(f) ☐ the attached specification, or

2. For use when submitting this Declaration after U.S. application filing date

(g) ☐ the specification in the U.S.  
Application:Application No.  
(if available)filed on:  
(must be filled)

and with amendments (if applicable):

filed on

,or

3. For PCT-US national entry under 35 U.S.C. 371 (for use when filing this Declaration before and after the U.S. national entry date)

(h) ☒ the specification in the  
International Application:PCT  
Application No.**PCT/JP2005/005003**filed on:  
(international  
filing date)**March 18, 2005,**

(Check here only for US national entry under 35 U.S.C. 371.)

and with amendments (if applicable):

filed on:

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

I acknowledge my duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a-d), §172, or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below, and have also identified below any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

(Foreign Priority Information)

COUNTRY	APPLICATION NO.	DATE OF FILING	PRIORITY CLAIMED
Japan	2004-079873	March 19, 2004	Yes

☐ Additional foreign or international application numbers are listed on a supplemental priority sheet attached hereto.



I hereby claim the benefit under Title 35, United States Code §119(e) of any United States Provisional application(s) listed below.

APPLICATION NO.		U.S. PROVISIONAL APPLICATION FILING DATE	

☐ Additional U.S. provisional application numbers are listed on a supplemental priority sheet attached hereto.

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s), or §365(C) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

APPLICATION NO.		U.S. FILING DATE	STATUS: PATENTED, PENDING, ABANDONED

☐ Additional U.S. or international application numbers are listed on a supplemental priority sheet attached hereto.

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the attorneys and agents associated with U.S. Patent and Trademark Office Customer Number identified bellow to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to that customer number.

I hereby authorize the U.S. attorneys and agents associated with the customer number to accept and follow instructions from Matsushita Electric Industrial Co., Ltd., and any affiliated or subsidiary company thereof, received via their corporate representatives and/or their foreign patent attorneys or agents, if any, as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys or agents and myself.

Direct Correspondence to:

**CUSTOMER NUMBER 53080**

I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

**INVENTOR (s)**

Full Name of Sole or First Inventor	FIRST NAME Yoshitaka	LAST NAME KINOSHITA	SIGNATURE <i>Yoshitaka Kinoshita</i>	DATE OF SIGNATURE July 27, 2006
Residence & Citizenship	CITY, STATE or COUNTRY Kagoshima, JAPAN			CITIZENSHIP JAPAN
Post office address	ADDRESS c/o Matsushita Electric Industrial Co., Ltd., 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan			

Full Name of Second Inventor	FIRST NAME Hidenori	LAST NAME KAMEI	SIGNATURE <i>Hidenori Kamei</i>	DATE OF SIGNATURE July 27, 2006
Residence & Citizenship	CITY, STATE or COUNTRY Fukuoka, JAPAN			CITIZENSHIP JAPAN
Post office address	ADDRESS c/o Matsushita Electric Industrial Co., Ltd., 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan			

Docket No.: 071971-0741

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

Yoshitaka KINOSHITA, et al.

Application No.: Not yet assigned

Group Art Unit: Not yet assigned

Filed: September 19, 2006

Examiner: Not yet assigned

For: SEMICONDUCTOR LIGHT-EMITTING DEVICE AND ILLUMINATING DEVICE

**PRELIMINARY AMENDMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Prior to examination of the above-referenced application, please amend the application as follows:

**Amendments to the Specification** begin on page 2 of this paper.

**Amendments to the Claims** begin on page 5 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

An **Appendix** containing 35 sheets each of clean and marked-up substitute specification is attached following page 8 of this paper.

**IN THE SPECIFICATION:**

*Please insert the following new paragraph after the Title and before the "TECHNICAL FIELD":*

**-- RELATED APPLICATIONS**

This application is the U.S. National Phase under 35 U.S.C. § 371 of International Application No. PCT/JP2005/005003, filed on March 18, 2005, which in turn claims the benefit of Japanese Application No. 2004-079873, filed on March 19, 2004, the disclosures of which Applications are incorporated by reference herein.—

*Please amend the paragraph beginning on page 9 at line 26 and bridging page 10 as follows:*

[0031] FIGS. 2(a) and 2(b) show an exemplary structure of the substrate 10 made of GaN. FIG. 2(a) shows the plan structure thereof, and FIG. 2(b) shows a cross-sectional structure thereof taken along the line ~~VIIa—VIIa~~ IIb - IIb in FIG. 2(a). As shown in FIG. 2, the top surface of the substrate 10, which is an element formation surface, is inclined relative to the (0001) plane 10a of the plane direction of the GaN crystal, and the angle of inclination (off-angle) is about one degree at a maximum. The direction of inclination is the <11-20> direction, the <10-10> direction, or a direction between the <11-20> direction and the <10-10> direction of the crystal. Note that the (0001) plane of the plane direction means the c-plane in the hexagonal system.

*Please amend the paragraph beginning on page 14 at line 2 as follows:*

[0044] For the n-type cladding layer 13, use can be made of a compound whose general formula is represented by  $\text{Al}_g\text{Ga}_{1-g}\text{N}$  ( $0 \leq g < 1$ ). By employing the n-type cladding layer 13 made of group III-V nitride semiconductor with a wider band gap than the In-containing n-type semiconductor layer 12, hole overflow from the light-emitting layer 14 can be effectively prevented. Although the n-type cladding layer 13 is preferably doped with an n-type impurity, it may be doped with no n-type impurity. If it is doped with an n-type impurity, it is recommended that the carrier concentration of the cladding layer 13 is lower than those of the n-type contact layer 11 and the In-containing n-type semiconductor layer 12. By employing such a structure, the n-type

cladding layer 13 has a higher resistance than the n-type contact layer 11, so that the n-type cladding layer 13 blocks electron flow from the n-type contact layer 11 through the n-type cladding layer 13 toward the light-emitting layer 14. Thus, electrons spread uniformly at the interface between the In-containing n-type semiconductor layer 12 and within the n-type cladding layer 13. Therefore, uniform electron injection into the light-emitting layer 14 can be realized to uniformize spatial distribution of light emission from the light-emitting layer 14. As a result of this, a uniform plane emission of light can be provided from the back surface of the substrate 10 serving as the main light-emitting plane.

*Please amend the paragraph beginning on page 18 at line 19 as follows:*

[0058] As shown in FIG. 3, for the conventional stacked film of group III-V nitride semiconductor not provided with the In-containing n-type semiconductor layer 12, the standard deviation of photoluminescence intensity was 32.9%, which indicates very wide variations. On the other hand, for the stacked film of the present invention made of group III-V nitride semiconductor and provided with the In-containing n-type semiconductor layer 12, the standard deviation was 4.1%, from which it is obvious that the light-emitting layer 14 is formed uniformly on the substrate.

*Please amend the paragraph beginning on page 31 at line 7 as follows:*

[0113] Further, a translucent electrode 18 is provided on the top surface of the p-type semiconductor layer 15, and emitted light is taken from the semiconductor layer formation surface thereof. Provision of the translucent electrode 18 can reduce the area of the p-side electrode 16, so that light absorption by the p-side electrode 16 can be avoided. Moreover, since the area of the translucent electrode 18 can be increased, a current can be passed uniformly through the light-emitting layer 14. This enhances the optical power output and reduces the operating voltage. It is sufficient that the translucent electrode 18 is formed of a known indium ~~titanium~~ tin oxide (ITO) film or the like.

*Please amend the paragraph beginning on page 33 at line 24 and bridging page 34 as follows:*

[0124] An illuminating device according to a fourth embodiment of the present invention will be described below with reference to the accompanying drawings. FIG. 13 shows a cross-sectional structure of a light-emitting unit 60 used for the illuminating device according to the fourth embodiment. Referring to FIG. 13, the submount 51 with the light-emitting device adhering thereto is allowed to adhere to the inside of a cup of a lead frame 62 in electrically connected relation with Ag paste or the like. The n-side substrate electrode of the submount ~~[[50]]~~ 51 is electrically connected to a lead frame 64 with a wire 63 interposed therebetween. The cup of the lead frame 62 is molded with resin 65.

## **IN THE CLAIMS:**

*This listing of claims will replace all prior versions and listings of claims in the application*

### **Listing of Claims:**

1. (Currently Amended) A semiconductor light-emitting device comprising:  
a substrate made of group III-V nitride semiconductor;  
a first n-type semiconductor layer containing indium and formed over a main surface of the substrate; and  
a light-emitting layer formed ~~between~~ over the first n-type semiconductor layer and the substrate.
2. (Original) The device of claim 1,  
wherein the substrate is made of gallium nitride.
3. (Original) The device of claim 1,  
wherein the main surface of the substrate is polished.
4. (Original) The device of claim 3,  
wherein the main surface of the substrate is etched.
5. (Original) The device of claim 3,  
wherein the main surface of the substrate is planarized.
6. (Original) The device of claim 1,  
wherein the light-emitting layer has a multiple quantum well structure formed by alternately stacking a quantum well layer and a barrier layer, and  
the quantum well layer has a thickness of 1 to 2.5 nm inclusive.
7. (Currently Amended) The device of claim 1,  
wherein the first n-type semiconductor layer is made of a compound whose general

formula is represented by  $\text{In}_a\text{Al}_b\text{Ga}_{1-a-b}\text{N}$  ( $0 < a < 1, 0 \leq b < 1, a+b \leq 1$ ) ( $0 < a \leq 1, 0 \leq b < 1, a+b \leq 1$ ).

8. (Original) The device of claim 7,

wherein the aluminum content of the first n-type semiconductor layer is 3% or lower.

9. (Original) The device of claim 1,

wherein the first n-type semiconductor layer has a thickness of 10 nm to 1  $\mu\text{m}$  inclusive.

10. (Original) The device of claim 1, further comprising a second n-type semiconductor layer formed between the substrate and the first n-type semiconductor layer.

11. (Original) The device of claim 10,

wherein the second n-type semiconductor layer is made of a compound whose general formula is represented by  $\text{In}_c\text{Al}_d\text{Ga}_{1-c-d}\text{N}$  ( $0 \leq c < 1, 0 \leq d < 1, c+d < 1$ ).

12. (Original) The device of claim 11,

wherein the second n-type semiconductor layer is an n-type contact layer.

13. (Original) The device of claim 8, further comprising a third n-type semiconductor layer formed between the first n-type semiconductor layer and the light-emitting layer.

14. (Original) The device of claim 13,

wherein the third n-type semiconductor layer is an n-type contact layer.

15. (Original) The device of claim 1, further comprising a fourth n-type semiconductor layer formed between the first n-type semiconductor layer and the light-emitting layer.

16. (Original) The device of claim 15,

wherein the fourth n-type semiconductor layer is made of a compound whose general formula is represented by  $\text{Al}_e\text{Ga}_{1-e}\text{N}$  ( $0 \leq e < 1$ ).

17. (Original) The device of claim 16,  
wherein the fourth n-type semiconductor layer is a cladding layer.
18. (Original) The device of claim 17,  
wherein the cladding layer has a thickness of 5 to 200 nm inclusive.
19. (Original) The device of claim 1, further comprising:  
an n-type contact layer which is formed between the substrate and the light-emitting layer  
and a portion of which is exposed;  
an n-side electrode formed on the exposed portion of the n-type contact layer;  
an n-type cladding layer formed between the first n-type semiconductor layer and the  
light-emitting layer;  
a p-type semiconductor layer formed on the light-emitting layer; and  
a p-side electrode formed over the p-type semiconductor layer,  
wherein the device is mounted with an element formation surface thereof facing a  
submount for mounting.
20. (Currently Amended) A illuminating device comprising the multiple semiconductor  
light-emitting devices of ~~elaims 1-19~~ claim 1.

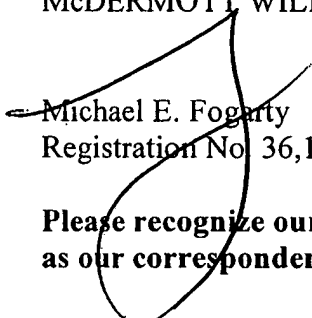


**REMARKS**

The specification in the above-referenced application has been amended to incorporate the continuity information and correct minor errors in translation. Claims 1 and 7 have been amended to correct minor errors and to delete the multiple dependency of claim 20. No new matter has been introduced. The attached substitute specification contains no new matter. Entry of this amendment is respectfully requested.

Respectfully submitted,

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